ware components, or any combination thereof designed to perform the functions described herein. Similarly, steps of a method or process described herein may be embodied directly in hardware, in a software module executed by a processor, or in a combination of the two. A software module may reside in RAM memory, flash memory, ROM memory, EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, or any other form of storage medium known in the art.

[0071] Although preferred embodiments of the present invention have been described in detail, it will be understood by those skilled in the art that various alterations, changes, modifications and substitutions can be made therein without departing from the spirit and scope of the invention as set forth in the appended claims. Moreover, the scope of the present application is not intended to be limited to the particular embodiments of the process, machine, manufacture, composition of matter, means, methods and steps described in the specification. As one of ordinary skill in the art will readily appreciate from the disclosure, processes, machines, manufacture, compositions of matter, means, methods, or steps, presently existing or later to be developed that perform substantially the same function or achieve substantially the same result as the corresponding embodiments described herein may be utilized according to the present disclosure. Accordingly, the appended claims are intended to include within their scope such processes, machines, manufacture, compositions of matter, means, methods, or steps.

REFERENCES/PRIOR ART

[0072] [1] Zhang C, Xu J, Ma W, Zheng W., PCR microfluidic devices for DNA amplification, *Biotechnology Advances* 2006 24(3), 243-284.

[0073] [2] Shi MM., Enabling large-scale pharmacogenetic studies by high-throughput mutation detection and genotyping technologies, *Clinical Chemistry* 2001 47(2), 164-172.

[0074] Antiplatelet Agents Aspirin and Clopidogrel Are Hydrolyzed by Distinct Carboxylesterases, and Clopidogrel Is Transesterificated in the Presence of Ethyl Alcohol, Man Tang, Madhu Mukundan, Jian Yang, Nathan Charpentier, Edward L. LeCluyse, Chris Black, Dongfang Yang, Deshi Shi, and Bingfang Yan, Department of Biomedical and Pharmaceutical Sciences, University of Rhode Island, Kingston, Rhode Island (M.T., M.M., J.Y., N.C., D.Y., D.S., B.Y.); and CellzDirect, Austin, Tex.

[0075] Comments on "Anti-Influenza Prodrug Oseltamivir Is Activated by Carboxylesterase Human Carboxylesterase 1, and the Activation Is Inhibited by Antiplatelet Agent Clopidogrel" Received Dec. 21, 2006; accepted Jan. 22, 2007.

[0076] Anti-Influenza Prodrug Oseltamivir Is Activated by Carboxylesterase Human Carboxylesterase 1, and the Activation Is Inhibited by Antiplatelet Agent Clopidogrel, Deshi Shi, Jian Yang, Dongfang Yang, Edward L. LeCluyse, Chris Black, Li You, Fatemeh Akhlaghi, and Bingfang Yan; Department of Biomedical and Pharmaceutical Sciences, University of Rhode Island, Kingston, Rhode Island (D.S., J.Y., D.Y., L.Y., F.A., B.Y.); and CellzDirect, Austin, Tex. (E.L.L., C.B.) Received Jul. 28, 2006; accepted Sep. 7, 2006.

[0077] See also FIG. **7** (page 10).

What is claimed is:

1. A point-of-care (POC) device comprising:
- a housing;
- a power supply disposed within the housing;
- a memory disposed within the housing;
- a user interface attached to or integrated into the housing;
- one or more communication interfaces disposed within, attached to or integrated into the housing;
- a test cartridge interface disposed within, attached to or integrated into the housing;
- one or more detectors or sensors disposed within the test cartridge interface or the housing to detect one or more properties of a sample or an analyte and generate a test results data based on the one or more properties;
- one or more processors disposed within the housing and communicably coupled to the memory, the user interface, the one or more communication interfaces, the test cartridge interface and the one or more detectors or sensors, wherein the one or more processors receive a test selection from the user interface, determine whether a test cartridge connected to the test cartridge interface matches the test selection, receive the test results data from the one or more detectors or sensors, generate a report based on an analysis of the test results data, and provide the report to the user interface; and
- wherein the test results data evaluate nucleic acids, proteins, metabolites, carbohydrates, lipids, chemicals, normal eukaryotic cells, diseased eukaryotic cells, tissue, bacteria, fungi or viruses.

2. The POC device as recited in claim **1**, wherein the one or more detectors or sensors detect the one or more properties of the sample or the analyte using fluorescence, luminescence, absorbance, infrared (IR) spectroscopies, surface plasmon resonance (SPR), nuclear magnetic resonance (NMR), Raman Spectroscopy, mass spectrometry (MS), IR (infrared) spectroscopy, X-ray photoelectron spectroscopy (XPS), atomic force microscopy (AFM), electron microscopy (EM), dynamic light scattering (DLS), quartz crystal microbalance (QCM), surface acoustic wave (SAW), or a combination thereof.

3. The POC device as recited in claim **1**, further comprising a light source disposed within the test cartridge interface or the housing.

4. The POC device as recited in claim **3**, wherein the light source comprises a laser, a light emitting diode or a light bulb.

5. The POC device as recited in claim **3**, further comprising one or more filters operably connected to the light source to provide a light having one or more specified wavelengths.

6. The POC device as recited in claim **1**, wherein the one or more processors receive a test selection from the user interface by:
- receiving one or more parameters from the user interface; and
- determining the test selection based on the one or more parameters.

7. The POC device as recited in claim **1**, wherein the test cartridge is determined based on the test selection or a decision tree process provided to the user interface by the one or more processors.

8. The POC device as recited in claim **1**, wherein the test cartridge is disposable.

9. The POC device as recited in claim **1**, wherein the housing further comprising an opening, a hinge, a door, a lid or a panel that provides access to the test cartridge interface.